CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM

NPDES NO. CA0085049

ORDER NO. R5-2005-XXXX

FOR
THE BOEING COMPANY
SOUTHERN GROUNDWATER STUDY AREA EXTRACTION AND TREATMENT SYSTEM
INACTIVE RANCHO CORDOVA TEST SITE
SACRAMENTO COUNTY

Specific sample station locations have been established under direction of the Board's staff, and a description of the stations is attached to this Order.

GROUNDWATER TREATMENT SYSTEMS MONITORING

Samples shall be collected from the inlet and outlet at each of the Admin GET (Outfall 001) and Alpha GET (Outfall 002) systems and analyzed. If the discharge is intermittent rather than continuous, then the samples shall be collected on the first day of the intermittent discharge. The time of collection of samples shall be recorded. The treatment system monitoring shall include at least the following:

Constituents	Units	Type of Sample	Inlet or Outlet	Sampling Frequency
Dissolved Oxygen	mg/L	Grab	Outlet	Monthly
Flow[1,6]	mgd	Grab	Outlet	Monthly
Total Dissolved Solids	mg/L	Grab	Outlet	Quarterly
Acute Toxicity[2,3]		Grab	Outlet	Quarterly
Volatile Organics[4]	µg/L	Grab	Inlet and Outlet	Monthly
pH[1]	Number	Grab	Outlet	Monthly
Turbidity	NTU	Grab	Outlet	Monthly
Temperature[1]	°F (°C)	Grab	Outlet	Monthly
Electrical Conductivity@25°C	µmhos/cm	Grab	Outlet	Monthly
Perchlorate[5]	µg/L	Grab	Inlet and Outlet	Monthly
Hardness as (as $CaCO_3$)	mg/L	Grab	Outlet	Quarterly

1 Field Measurements.
2 The analyses shall be performed in accordance with EPA/600/4-90/027, *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*.
3 Sampling of Effluent only.
4 Test method to be by EPA Methods 601 and 602, or 8010 and 8020, or 8260, or 500 series with a practical quantitation level no greater than 0.5 µg/L. All concentrations between the detection level and practical quantitation level shall be reported as trace.
5 A practical quantitation level no greater than 4 µg/L. All concentrations between the detection level and quantitation level shall be reported as trace.
6 Flows shall be differentiated between discharge to surface water, injection well, and provided for construction.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Receiving water monitoring shall include at least the following:

Station	Description
R-1	At least 100 feet upstream on Morrison Creek from the discharge from the Admin GET (Outfall 001)
R-2	At least 50-feet downstream on Morrison Creek from the discharge from the Admin GET (Outfall 001)
R-3	At least 50-feet downstream on Morrison Creek from the discharge from the Alpha GET (Outfall 002)

Constituents	Units	Station	Sampling Frequency
Dissolved Oxygen	mg/L	R-1, R-2, R-3	Monthly
Electrical Conductivity@25°C	µmhos/cm	R-1, R-2, R-3	Quarterly
Total Dissolved Solids	mg/L	R-1, R-2, R-3	Quarterly
Volatile Organics[1]	µg/L	R-1, R-2, R-3	Monthly
pH[2]	Number	R-1, R-2, R-3	Monthly
Turbidity	NTU	R-1, R-2, R-3	Monthly
Temperature[2]	°F (°C)	R-1, R-2, R-3	Monthly
Perchlorate[3]	µg/L	R-1, R-2, R-3	Monthly
Hardness as (as $CaCO_3$)	mg/L	R-1, R-2, R-3	Quarterly

1 Test method to be by EPA Methods 601 and 602, or 8010 and 8020, or 8260, or 500 series with a practical quantitation level no greater than 0.5 µg/L. All concentrations between the detection level and practical quantitation level shall be reported as trace.
2 Field measurements.
3 A practical quantitation level no greater than 4 µg/L. All concentrations between the detection level and quantitation level shall be reported as trace.

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions in the Morrison Creek. Attention shall be given to the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life
e. Visible films, sheens or coatings
f. Fungi, slimes, or objectionable growths
g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing to toxicity in Morrison Creek. The testing shall be conducted as specified in EPA 600/4-89-001. Chronic toxicity samples shall be collected at the discharge of the Ground Water Treatment Plant prior to entering the drainage ditch. Samples collected from the outlet of the treatment unit shall be representative of the volume and quality of the discharge. The time of collection for samples shall be recorded. Chronic toxicity monitoring shall include the following:

Species:	*Pimephales promelas, Ceriodaphnia dubia, Selenastrum capriocornutum*
Frequency:	Once per quarter for first year, annually thereafter
Dilution Series:	100 percent effluent

REPORTING

Monitoring results shall be submitted to the Regional Board by the **25th day following the end of each calendar quarter** following sample collection. Annual monitoring results shall be submitted by the **last day of the January each year**. If results exceed effluent and/or receiving water limitations, then the Discharger must notify the Regional Board with 24-hours of receiving the information of the exceedance.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **30 January of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

a. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

b. A statement certifying when the flow meter (if feasible) and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).

The Discharger may also be requested to submit an annual report to the Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by:_____
THOMAS R. PINKOS, Executive Officer

_____
(Date)

AMM (02/10/05)